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| 10/613,842 | 07/03/2003 | Daryl E. Anderson | 200208831-1 | 6766 |
| 22879 7590 02/04/2010 HEWLETT-PACKARD COMPANY Intellectual Property Administration 3404 E. Harmony Road Mail Stop 35 FORT COLLINS, CO 80528 | | | EXAMINER SU, SUSAN SHAN | |
| | | | ART UNIT 3761 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/613,842

Applicant(s)

ANDERSON ET AL.

Examiner

SUSAN SU

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-42 is/are pending in the application.
- 4a) Of the above claim(s) 33-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims

Claims 1-20 and 22-42 are pending of which Claims 33-42 are withdrawn and Claims 1, 20, 28, and 30 are amended.

Response to Arguments

1. Applicant's arguments with respect to all rejected claims have been considered but are moot in view of the new ground(s) of rejection necessitated by amendments to all of the independent claims.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 and 5 are rejected under 35 U.S.C. 102(a) or (e) for being anticipated by Beverly (US 6,945,650).

With regard to Claim 1, Beverly teaches an ophthalmic apparatus comprising:

an eye-positioning device (10) for assisting a subject in positioning an eye (by having a spot for the subject to focus on) in a desired position for administering a fluid to the eye; and
an applicator (12) for dispensing the fluid into the eye conditionally upon positioning of the eye in the desired position.

With regard to Claim 5, Beverly also teaches a display (24) for displaying a real time image, however, with regard to the limitation that it is also for displaying "a target such that when the eye is aligned with the target, the eye is in the desired position." However, the language is held to be intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beverly for the purpose of easily aligning the eye for the subsequent procedure.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 2, 4, 6, 20, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beverly.

With regard to Claims 2 & 20, Beverly teaches an ophthalmic apparatus, comprising:

a dispensing apparatus for dispensing fluid into an eye of a subject;
an eye-position detector for detecting the current position of the eye relative
to the dispensing apparatus; and

a feedback device for receiving information from the eye-position detector corresponding to the position of the eye (display 24 shows the received information).

Beverly also teaches that the feedback signals corresponding to directions for moving the apparatus to the desired position. Beverly does not expressly teach that the feedback device provides information *to the subject* that assists the subject in *moving the eye* from the current position to a predetermined position relative to the dispensing apparatus for administering the fluid to the eye. However, Beverly teaches that the operator receives the information and moves the ophthalmic apparatus to align with the eye. A person of ordinary skill has good reason to pursue the known options (providing feedback to the operator to move the ophthalmic apparatus for alignment versus providing feedback to the subject to move his/her eyes for alignment) within his or her technical grasp. If this leads to the anticipated success (the eyes and the dispensing apparatus align), it is likely that product was not of innovation but of ordinary skill and common sense. In that instant the fact that a modification was obvious to try might show that it was obvious under § 103. See MPEP 2143 (E). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beverly for the purpose of allowing the possibility to operate the apparatus without an operator.

With regard to Claim 4, Beverly also teaches that the feedback mechanism provides visual cues.

With regard to Claims 6 & 23, Beverly also teaches an image pick-up device (inherent since an image of the eye is provided on display 24) for capturing an image of

the eye and a processor (60). The claim languages of "for processing the image of the eye and determining whether the eye is in the desired position for administering the fluid to the eye" are considered to be intended use of the processor. Since the prior art invention substantially meets the structure of the current device as claimed, it is capable of performing the intended use and therefore meets the claim. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beverly for the purpose of allowing the possibility to manipulate or process a recorded image for further information.

With regard to Claim 8, see explanation for feedback signal under Claims 2 & 20.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beverly as applied to Claims 2 above, and further in view of Yee (US 6,270,467). Beverly does not teach an audible cue. Yee teaches an ophthalmic apparatus providing audible cues (30). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beverly with Yee for the purpose of lending a user assistance to align his/her eyes for the subsequent medical procedure.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beverly in view of Miwa (US 6,299,305). Beverly does not expressly teach a CCD camera. Miwa teaches an ophthalmic apparatus that uses a CCD camera (10). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beverly with Miwa for the purpose of using a standard technology for capturing the position of the eye.

10. Claims 9, 10, 14-16, 22, 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beverly in view of Vo (US 5,171,306).

With regard to Claims 9, 10, 14-16, & 22, Beverly does not teach that the applicator comprises a frame or spectacle for wearing on the head of the subject and a fluid dispenser supported by the frame, wherein the fluid dispenser is configured to propel fluid into the eye. Vo teaches a spectacle-style applicator with a fluid dispenser (400 & 500) supported by the frame, the fluid dispenser configured to dispense fluid into the eye. Vo also teaches a fluid reservoir (200) and a controller (Col. 9 lines 15-16) that actuates the fluid dispenser to dispense a predetermined dosage of fluid (Col. 4 lines 29-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beverly with Vo for the purpose of adapting the alignment apparatus of Beverly for use in applying medicament to a patient's eyes.

With regard to Claim 28, Beverly teaches an ophthalmic apparatus for administering a fluid to an eye of a subject, comprising:

detecting means for detecting the position of the eye; and

dispensing means for dispensing the fluid into the eye only when the eye is in a predetermined position (inherent since the purpose of the apparatus is to align the eye with the dispensing means so that the subsequent medical procedure can be carried out safely and accurately).

Beverly does not teach that the fluid is a liquid. Vo teaches dispensing a liquid into the eye upon a predetermined condition. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beverly with Vo for the

purpose of adapting the apparatus for cooperative use with a system other than for the measure of intraocular pressure.

With regard to Claim 29, see explanation under Claims 6 & 23.

With regard to Claim 30, see explanation of feedback means under Claim 20.

With regard to Claim 31, the feedback means provides a visual (through display 24) signal.

11. Claims 11-13, 17, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beverly and Vo as applied to Claims 1, 9, or 28 above, and further in view of Bertera (US 5,368,582). Beverly and Vo do not teach a jet dispenser. Bertera teaches a spectacle-like device with a thermal or piezoelectric jet dispenser (14) with a plurality of orifices to apply treating fluid into an eye (Col. 5 lines 1-12, Col. 9 lines 3-17, Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beverly and Vo for the purpose of utilizing a known and practiced technology for dispensing a dosage of treating fluid to the eye.

12. Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beverly as applied to Claim 23 above, and further in view of Wickham et al. (US 6,159,186, "Wickham") and Vo. Beverly does not teach that the image capture device is a digital camera. Wickham teaches a fluid delivery system that employs a digital camera (28) as an image uptake device, and an image processor (34) capable of processing that camera's images (Col. 2 line 66 to Col. 3 line 13). Vo teaches a controller (Col. 9 lines 15-16) that controls a fluid dispenser. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Beverly

with Wickham and Vo for the purpose of utilizing a known technology to better determine the eye position and to have better control over how and when the fluid is dispensed. It would also be obvious to combine the processor of Wickham and the controller of Vo into one single processing unit for the purpose of making it possible to make the processing unit more compact.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Notice of References Cited.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUSAN SU whose telephone number is (571)270-3848. The examiner can normally be reached on M-F 9:00AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Susan Su/
Examiner, Art Unit 3761
/Tatyana Zalukaeva/

Supervisory Patent Examiner, Art Unit 3761